

CLEARANCE TABLE						
GROUP	REF	TYPE	CONDITION	DISTANCE	REQUIRED	CLEAR BY
TOP PHASE	TA	PH-E	STILL AIR	1231	1220	11
	TB	PH-E	STILL AIR	1305	1220	85
	TC	PH-E	STILL AIR	1530	1220	310
	TD	PH-E	STILL AIR	1565	1220	345
	TE	PH-E	STILL AIR	3366	1220	2146
MIDDLE PHASE	MA	PH-E	STILL AIR	1267	1220	47
	MB	PH-E	STILL AIR	1280	1220	60
	MC	PH-E	STILL AIR	1594	1220	374
	MD	PH-E	STILL AIR	2652	1220	1432
	ME	PH-E	STILL AIR	3963	1220	2743
BOTTOM PHASE	BA	PH-E	STILL AIR	1277	1220	57
	BB	PH-E	STILL AIR	1293	1220	73
	BC	PH-E	STILL AIR	1709	1220	489
	BD	PH-E	STILL AIR	2762	1220	1542
	DOWNLEADS	DA1	PH-E	STILL AIR	1554	1220
DA2		PH-E	SWUNG @ 45°	1612	760	852
*DB1		PH-PH	STILL AIR	1565	2500	-935
*DB2		PH-PH	SWUNG @ 45°	1602	1500	102
DC1		PH-E	STILL AIR	2516	1220	1296
DC2		PH-E	SWUNG @ 45°	2596	760	1836
*DD1		PH-PH	STILL AIR	1662	2500	-838
*DD2		PH-PH	SWUNG @ 45°	1670	1500	170
*DE1		PH-PH	STILL AIR	2375	2500	-125
*DE2		PH-PH	SWUNG @ 45°	2540	1500	1040
*DF1		PH-PH	STILL AIR	1963	2500	-537
*DF2		PH-PH	SWUNG @ 45°	1557	1500	57
DG1		PH-PH	STILL AIR	2628	2500	128
DG2		PH-PH	SWUNG @ 45°	2301	1500	801
*DH1		PH-PH	STILL AIR	2483	2500	-17
*DH2	PH-PH	SWUNG @ 45°	2303	1500	803	
DJ1	PH-PH	STILL AIR	2603	2500	103	
DJ2	PH-PH	STILL AIR	2603	2500	103	
DK	PH-E	STILL AIR	1329	1220	109	
DL	PH-E	STILL AIR	1532	1220	312	
DM	PH-E	STILL AIR	1591	1220	371	

* WHERE 2500mm STILL AIR PHASE TO PHASE CLEARANCE BETWEEN DOWNLEADS IS NOT ACHIEVED, SWUNG CONDITIONS HAVE BEEN CHECKED AND FOUND TO EXCEED THE 1500mm MINIMUM REQUIREMENT.

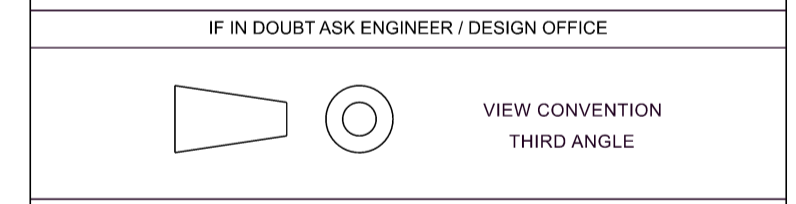
REV	DATE	BY	CHKD	APPD
A	13/01/2023	JJH	RF/JB	JB

DESCRIPTION

FIRST ISSUE

GENERAL NOTES:

- ALL DIMENSIONS ARE IN MILLIMETRES (mm).
- PHASE CONDUCTOR IS ZEBRA 400mm² ACSR 50°C
- ALL ELECTRICAL CLEARANCES CHECKED USING A TRUE 3D TOWER MODEL BASED UPON JL EVES TOWER DRAWINGS JE35/35750, 51 & 52
- INSULATOR SET DETAILS BASED ON WPD GENERIC DRAWINGS AS FOLLOWS:
 - (ST) GENERIC SUSPENDED TENSION SET: 52_WPD_ISD_217: (830mm DROP LENGTH SHOWN)
 - (U) GENERIC UPRIGHT LOW DUTY TENSION SET: 52_WPD_ISD_218: WITH 5 x 150mm ADDITIONAL CRANKED LINKS TO ALL CROSSARMS.
 - (I) GENERIC INVERTED LOW DUTY TENSION SET 52_WPD_ISD_219
- 132kV CLEARANCES IN ACCORDANCE WITH ENATS 43-125:
 - MINIMUM PHASE TO EARTH: 1220mm IN STILL AIR 760mm JUMPERS SWUNG UP TO 20° FROM VERTICAL
 - MINIMUM PHASE TO PHASE (BETWEEN DOWNLEADS): 2500mm IN STILL AIR 1500mm ON CONSIDERATION OF SWUNG CONDITIONS
 - MINIMUM PHASE TO PHASE (AT THE SUPPORT): 1350mm IN STILL AIR 840mm ON CONSIDERATION OF SWUNG CONDITIONS
- 132kV SUBSTATION CLEARANCES IN ACCORDANCE WITH TS 2.01 15
 - 2900mm SAFETY CLEARANCE HORIZONTAL (DSH)
 - 3800mm SAFETY CLEARANCE VERTICAL (DS)
 - 2400mm FENCE HEIGHT PEDESTRIAN ACCESS
- DOWNLEAD MID-POINT SAG VALUES BASED UPON A AVERAGE TANGENTIAL TENSION OF 1.50kN FOR THE TOP AND MIDDLE SUB CONDUCTORS AND 2.0kN FOR THE BOTTOM SUB CONDUCTOR AT 15°C INCLUDING ALLOWANCE FOR INSULATOR SET WEIGHTS AND A MAXIMUM OPERATING TEMPERATURE OF 50°C:
 - CIRCUIT 1
 - TOP - 1.41m
 - MIDDLE - 1.03m
 - BOTTOM - 0.71m
- INCOMING LINE CONDUCTOR FALLAWAY ANGLES BASED ON PROFILE DRAWING No. 01_220550_02_A
- TABULATED CLEARANCES ARE THEORETICAL AS DETERMINED FROM THE CAD MODEL. MINIMUM CLEARANCES MUST BE CONFIRMED AT THE POINT OF INSTALLATION BY THE APPOINTED CONTRACTOR.
- LINE LANDING GANTRY STRUCTURE BASED ON WPD DRAWING No. J00876-GA-AA230_B - GENERAL ARRANGEMENT



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PROJECT

UU ROUTE 132kV POC TOWER No. UU20A

TITLE

132kV FEASIBILITY WCD FOR TOWER UU20A TOWER TYPE: L132 (J L Eves) D2 E20 (C534) SINGLE CIRCUIT DOWNLEADS TO NEW WPD CHAIR STRUCTURE (Option 2)

SCALE	1:150 (U.N.O)	DESIGNED	JB
DATE	12/12/2022	CHECKED	RF/JB
DRAWN	JJH	APPROVED	JB



ORIGINAL SIZE	A1	DRAWING NUMBER	17_220550_04	REV	A
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KEY:

- (S) (SUSPENSION EXISTING SET)
- (ST) SUSPENDED TENSION SET
- (U) UPRIGHT LOW DUTY TENSION SET (WITH DOUBLE FLAG DEAD END)
- (I) INVERTED LOW DUTY TENSION SET (WITH ANGLED JUMPER PALMS)

CDM RESIDUAL RISK

- DESIGN BASED HAZARDS ARE ACTIVELY ELIMINATED WHERE PRACTICAL. WHERE HAZARDS ARE NOT ELIMINATED THEY ARE IDENTIFIED BY THIS SYMBOL.
- HAZARDS / RISKS THAT SHOULD BE CONSIDERED BY A COMPETENT CONTRACTOR ARE NOT IDENTIFIED